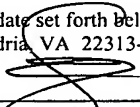


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I hereby certify that this correspondence is being deposited with the United States Postal Service on the date set forth below as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P O Box 1450, Alexandria, VA 22313-1450.

Date of Signature and Deposit: July 24, 2007


Sara D. Vinarov

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Thomas P. Zwaka
James A. Thomson

Date: July 24, 2007

Serial No.: 10/774,122

Group Art Unit: 1633

Filed: 02/06/2004

Examiner: Maria Marvich

Title: DIRECTED GENETIC MODIFICATIONS
OF HUMAN STEM CELLS

File No.: 960296.99021

Confirmation No.: 8384

RESPONSE

Mail Stop Amendment
Commissioner for Patents
P O Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the non-final Office Action dated March 12, 2007, applicants respond herewith as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.